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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,400	02/06/2002	Shigetaka Kobayashi	JP920000346US1	9612

7590 10/03/2006

Arthur J. Samodovitz  
IBM Corporation, Dept. IQ0A/Bldg. 40-3  
1701 North Street  
Endicott, NY 13760

EXAMINER

FISCHER, JUSTIN R

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

✓

**SUPPLEMENTAL**  
**Notice of Allowability**

Application No.

10/068,400

Applicant(s)

KOBAYASHI ET AL.

Examiner

Justin R. Fischer

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 31 May 2006.
2. ☒ The allowed claim(s) is/are 42-51 and 62-64 (renumbered 1-13).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

### **DETAILED ACTION**

1. This Supplemental Notice of Allowance is being provided to include claims 63 and 64 (excluded in previous communication).

#### ***Allowable Subject Matter***

2. Claims 42-51 and 62-64 (renumbered 1-13) are allowed. The following is an examiner's statement of reasons for allowance:

Uchiyama is seen to constitute the closest prior art of record. Uchiyama discloses a method of bonding an IC chip to a glass substrate of a liquid crystal device with a thermosetting anisotropic conductive film (ACF) or other thermosetting resin, wherein the ACF is placed between the IC chip and the glass substrate. In this instance, the ACF is cured to bond the IC chip and glass substrate together by irradiating near infrared energy (electromagnetic waves) through the glass substrate to heat and cure the ACF (Column 13, Line 60-Column 14, Line 26). While the reference fails to expressly describe the substrate as being fiberglass reinforced epoxy (FR4), the APA recognizes the conventional use of glass substrates for liquid crystal displays, such as FR4. As to the "resilient sheet", one of ordinary skill in the art at the time of the invention would have found it obvious to include such a layer since it constitutes an extremely well-known and conventional layer in a plurality of lamination methods, including those related to LCD manufacture, as shown for example by Tagusa (Column 12, Lines 35-60)- the use of such cushion layers is further known in order to avoid damage of the substrate materials, which are commonly formed of relatively fragile

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material, such as glass or synthetic resin. The combination of references, however, does not suggest, disclose, or teach a cooling step in which a gas is discharged against a portion of the resilient sheet peripheral to the IC chip adjacent to the filter and polarizer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, reading "Justin R Fischer". The signature is fluid and cursive, with the first name "Justin" and last name "Fischer" clearly distinguishable.

Justin R Fischer  
Primary Examiner  
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JRF  
September 8, 2006